

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

LISTING OF CLAIMS:

Claims 1 to 77: (Canceled).

78. (Withdrawn) A plasma CVD device for vacuum coating a substrate, comprising:

a vacuum recipient;

a bearing device for receiving the substrate to be coated;

an arrangement for producing a plasma in an interior of the vacuum recipient and including one of a microwave source, a sputter cathode, a system for producing a high-current arc, and a hollow cathode; and

a device, capable of being controlled separately from the arrangement for producing the plasma, for producing a substrate voltage that is applied to the substrate to be coated, wherein the device for producing the substrate voltage includes a direct voltage power supply unit that can be pulsed in bipolar fashion so that at least one of a length and a height of a positive pulse and a negative pulse of the substrate voltage can be adjusted independently of one another.

79. (Withdrawn) The plasma CVD device according to claim 78, wherein: the plasma CVD device is operated as a pass-through arrangement in which the substrate is moved on one of a uniform fashion and a pulsed fashion.

80. (Withdrawn) The plasma CVD device according to claim 78, wherein: the arrangement for producing the plasma is operated in a pulsed fashion.

81. (Currently Amended) A multilayer structure, comprising:
alternating first and second layers, the first layer including an individual hard-material layers layer and one of the second layer including an individual carbon layers layer and or an individual silicon layers, wherein:

the hard-material layers include ~~one of~~ a metal, a metal carbide, a metal silicide, a metal carbosilicide, a metal siliconitride, a metal carbide-containing

carbon, or a metal silicide-containing silicon, and a mixture of at least two of the metal, the metal carbide, the metal silicide, the metal carbo-silicide, the metal siliconitride, the metal carbide-containing carbon, and the metal silicide-containing silicon, and the metal includes ~~one of tungsten, chromium[[,]]~~ or niobium, ~~and molybdenum.~~

82. (Currently Amended) The multilayer structure according to claim 81, wherein:

the carbon layers include one of amorphous carbon containing hydrogen, amorphous hydrogen-free carbon, carbon containing silicon, and carbon containing a the metal, ~~and~~

~~the metal is selected from hard secondary group~~ B-group metals.

83. (Previously Presented) The multilayer structure according to claim 81, wherein:

the silicon layers include one of amorphous silicon containing hydrogen, amorphous hydrogen-free silicon, silicon containing carbon, and silicon containing metal.

84. (Previously Presented) The multilayer structure according to claim 81, wherein:

the hard material layers include at least one hard material layer,
the carbon layers include at least one carbon layer, and
the silicon layers include at least one silicon layer.

85. (Previously Presented) The multilayer structure according to claim 84, wherein:

the hard material layers include one hard material layer,
the carbon layers include one carbon layer, and
the silicon layers include one silicon layer.

86. (Previously Presented) The multilayer structure according to claim 81, wherein:

thicknesses of the hard material layers, the silicon layers, and the carbon layers are between approximately 1nm and approximately 10 nm.

87. (Previously Presented) The multilayer structure according to claim 81, wherein:

thicknesses of the hard material layers, the silicon layers, and the carbon layers are between approximately 2 nm and approximately 5 nm.

88. (Previously Presented) The multilayer structure according to claim 81, wherein:

an overall layer thickness of the multilayer structure is between approximately 1 μm and approximately 10 μm .

89. (Previously Presented) The multilayer structure according to claim 81, wherein:

an overall layer thickness of the multilayer structure is between approximately 1 μm and approximately 4 μm .

90. (Previously Presented) The multilayer structure according to claim 81, wherein:

the hard material layers include one of Me, MeC, MeSi, Me(CSi), and Me(SiN), and the carbon layers include one of a-C:H and a-C.

Claim 91: (Canceled).

92. (Currently Amended) The multilayer structure according to claim 81, wherein:

the hard material layers are made of ~~the multilayer structure is made up of~~
~~alternating MeC layers and~~ the carbon layers are made of C-(MeC) layers.

93. (Previously Presented) The multilayer structure according to claim 81, wherein:

the hard material layers include one of Me, MeC, MeN, MeSi, Me(CN), Me(CSi), and Me(SiN), and the silicon layers include one of a-Si:H or a-Si.

94. (Currently Amended) The multilayer structure according to claim 81, wherein: one of the hard material layers, ~~the carbon layers~~, and the silicon layers contain at least one of silicon, boron, nitrogen, oxygen, carbon, and a metal, and boron and carbon are not simultaneously present in the one of the hard material layers, ~~the carbon layers~~, and the silicon layers.

95. (Previously Presented) The multilayer structure according to claim 81, wherein:

the multilayer structure is capable of coating one of a machining tool and a non-cutting shaping tool.